

Message

From: Moon, Dave [Moon.Dave@epa.gov]
Sent: 5/31/2022 5:07:51 PM
To: Wirick, Holiday [wirick.holiday@epa.gov]
Subject: RE: 2018 Aluminum Criteria Implementation Questions

Got it. Thanks Holly

From: Wirick, Holiday <wirick.holiday@epa.gov>
Sent: Tuesday, May 31, 2022 11:04 AM
To: Moon, Dave <Moon.Dave@epa.gov>; R8 WQS <R8_WQS@epa.gov>
Subject: Re: 2018 Aluminum Criteria Implementation Questions

Hi Dave, neither ND nor SD has adopted the 2018 aluminum criteria but ND is planning to during its next triennial. Thanks.

From: Moon, Dave <Moon.Dave@epa.gov>
Sent: Tuesday, May 31, 2022 9:03 AM
To: R8 WQS <R8_WQS@epa.gov>
Subject: FW: 2018 Aluminum Criteria Implementation Questions

Hey Team

Here is another set of questions, this one is about the 2018 **aluminum** criteria.

I filled out the table for Colorado and started a set of "notes" below to provide additional info. Please respond with answers for your states.

Question	CO	MT	ND	SD	UT	WY
1. Has the state adopted the 2018 Al criterion?	No					
2. If so, is there an implementation procedure and does procedure specify certain %tiles of the MLR outputs?	TBD					
3. Have any states looked at applying the criteria based on a certain flow regime?	TBD					

Notes:

- Colorado has formed a stakeholder work group that is compiling ambient and effluent data (aluminum, pH, hardness, DOC) and working to test/evaluate the new analytical method for aluminum (pH = 4.0) that is described in the EPA implementation guidance. It appears that for most of the observed conditions in Colorado, the 2018 EPA criteria generally are less stringent than the hardness-dependent aluminum values Colorado adopted in 2010 (but those hardness-dependent aluminum values have not been applied to very many water bodies). It is not clear when Colorado will get around to updating the acute and chronic aluminum WQS and applying them to individual water bodies.
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From: Arsenault, Dan <Arsenault.Dan@epa.gov>

Sent: Tuesday, May 31, 2022 8:23 AM

To: Hansel, Joel <Hansel.Joel@epa.gov>; Labiosa, Rochelle <labiosa.rochelle@epa.gov>; Moon, Dave <Moon.Dave@epa.gov>; Johnson, Aaron <Johnson.AaronK@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>; Lavaty, Ann <Lavaty.Ann@epa.gov>; Fleming, Terrence <Fleming.Terrence@epa.gov>; Hakowski, Denise <Hakowski.Denise@epa.gov>; Gaylord, Brent <Gaylord.Brent@epa.gov>

Subject: 2018 Aluminum Criteria Implementation Questions

Hi All:

In R1 we have several states that are in various stages of adopting the 2018 AI criteria. MA submitted their package to us in January and we are working our way through consultation with the services. They have developed watershed defaults but also developed and implementation procedure to develop criteria for each discharge once the information is available. They are using the 10th %ile of the MLR for waters without endangered species and the 5th %ile for waters with endangered species. VT is just beginning their TR and are looking to adopt the criteria and are using the same percentiles as MA. They have incorporated this into an implementation procedure which we have reviewed. NH is also beginning their TR and are looking to adopt the 2018 AI criteria but they feel the 10th and 5th percentiles are overly conservative. Instead they are looking to develop criteria based on a particular flow regime. They provided info showing the relationship between flow and the criteria from the MLR but the relationship isn't very strong.....R squared 0.22. While some waters show a relationship that the criteria gets higher as flows get lower there are a couple that show the criteria get lower as the flow gets lower. And none of these relationships are very strong. What's driving NH's concerns are a couple waters that have low pH and DOC that result in some very low criteria if the 10th and 5th %iles are used.....10-12 ug/l.

So I've got a couple of questions.

1. Do you have states that have adopted the 2018 AI criteria?
2. If so, did the state develop and implementation procedure and did the procedure specify certain %iles of the MLR outputs to use?
3. Have you had any states look at applying the criteria based on a certain flow regime?

Thanks in advance!

-dan